

CLAIMS

What is claimed is:

1. A backlight device, said device comprising:

a photo conductive plate used for visible light to go through;

5 a point light source, which is beside said photo conductive plate, used for producing visible light;

a first diffusing top, which is beside said photo conductive plate, used for diffusing the visible light from said point light source to the lighting method of uniform line light source;

10 a second diffusing top, which is on the bottom of said photo conductive plate, used for diffusing the visible light from said first diffusing top to the lighting method of uniform top light source;

a diffusing reflect objective, which is below said photo conductive plate, used for diffusing the light and then reflecting the diffused light to said photo conductive plate.

20 2. The device according to claim 1, wherein said backlight device further comprises a diffusing slice, which is above said photo conductive plate and below a LCD, is used to prevent the formation of image of said backlight device below said diffusing slice from being displayed on said LCD.

25 3. The device according to claim 1, wherein said point light source comprises using LED to light. The.

4. The device according to claim 1, wherein said 1st diffusing top comprises micro-structure used for light to transfer uniformly.

30 5. The device according to claim 4, wherein the shape of said micro-structure comprises circle.

6. The device according to claim 4, wherein the shape of said micro-structure comprises ellipse.

5 7. The device according to claim 4, wherein the shape of said micro-structure comprises square.

8. The device according to claim 1, wherein said 2nd diffusing top comprises micro-structure used for light to transfer uniformly.

10 9. The device according to claim 8, wherein the shape of said micro-structure comprises V shape.

15 10. The device according to claim 8, wherein the shape of said micro-structure comprises circle.

11. The device according to claim 1, wherein said 1st diffusing top is made up of diffusing material.

20 12. The device according to claim 1, wherein said 2nd diffusing top is made up of diffusing material.

25 13. The device according to claim 1, wherein said device further comprises an air gap between said photo conductive plate and said 1st diffusing top, wherein said air gap is used for transferring the visible light of said point light source to the lighting method of line light source (or named as rectification action).

30 14. The device according to claim 1, wherein said diffusing reflect objective comprises a diffusing reflect slice.

15. The device according to claim 1, wherein said diffusing reflect objective comprises a white color bottom frame.

5 16. The device according to claim 1, wherein the location of said point light source is in front and below said photo conductive plate.

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